

© 2004 Micron Technology, Inc. All Rights Reserved.

Micron

## OPTIONS CONSIDERED IN 1994 TO MAINTAIN WATER SUPPLY

Relocate new production facilities away from SE Boise

Increase wastewater recycle rate

Relocate diversions to outside of GWMA

**Treat Boise River water for quality and temperature** 

Recharge the aquifer with Boise River water



# ARR (Aquifer Recharge and Recovery)

Store water underground during times of plentiful supply

Recover water from wells during times of short supply

Successfully used in many places around the world

**Quality or quantity purposes** 

Typically involves injection and recovery from the same well



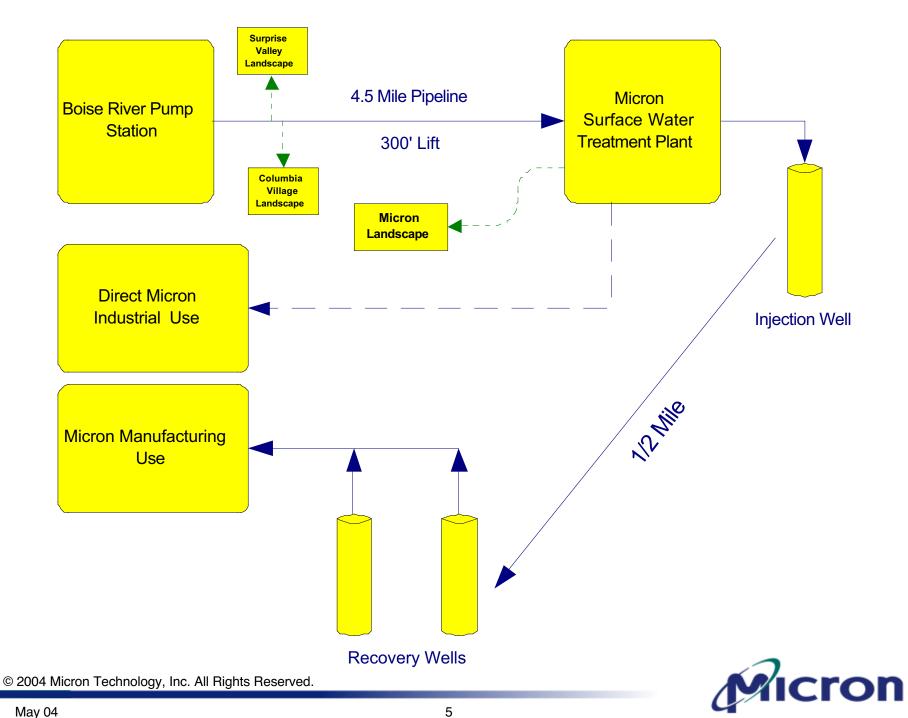
#### **Micron ARR Goals**

Achieve stabilization of local aquifer water levels

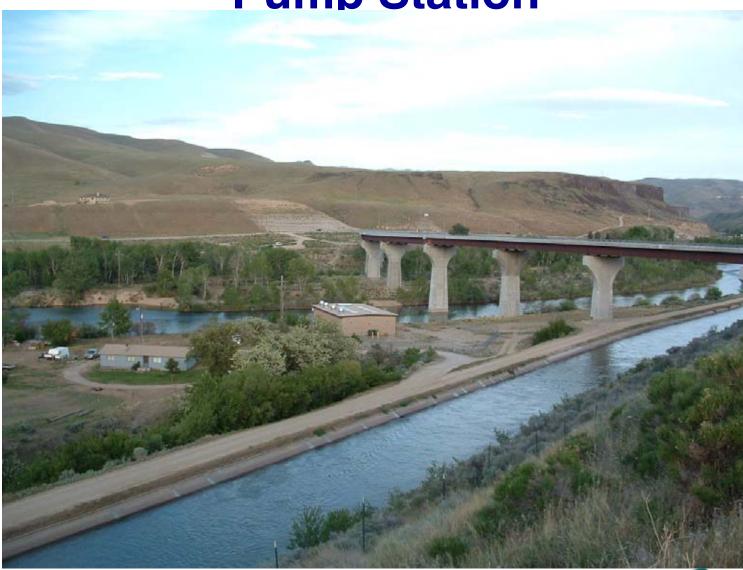
Augment the local groundwater supply for future use

Maintain or improve existing groundwater quality





## **Pump Station**



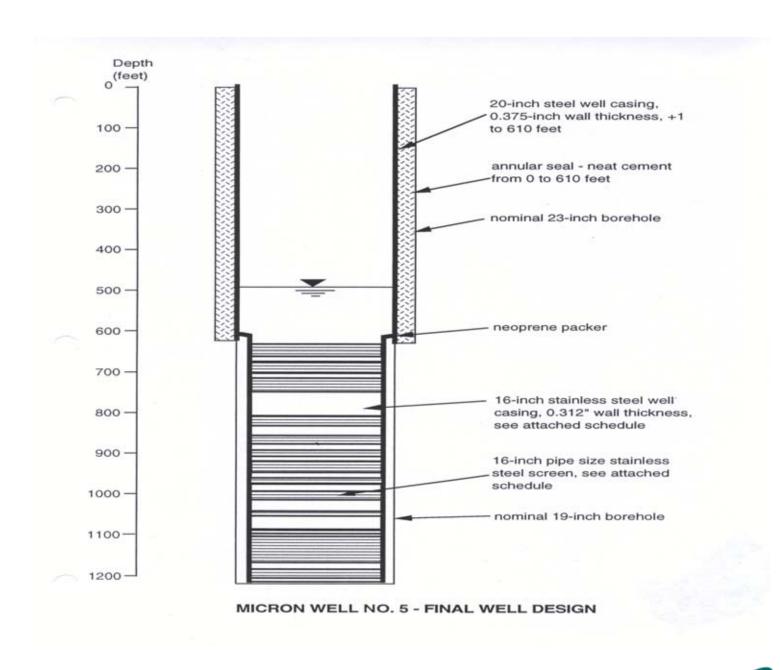
© 2004 Micron Technology, Inc. All Rights Reserved.



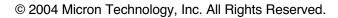
#### **Micron Surface Water Treatment Plant**







8



Micron

## **Project Status**

Since start-up in 1998, the project has delivered 9,850 AF of surface water from Boise River which otherwise would have been supported by ground water from the SBGWMA

**ARR Demonstration Phase operational March 1, 2001** 

Recharge flow rate 450 gpm summer to 650 gpm winter

Total Recharged to May 2004 approximately 1,850 AF

Treatment and recharge system designed for 3,000 gpm

9



## **Closing Comments**

Aquifer conditions in the Southeast Boise GWMA are not typical of most areas in the Treasure Valley.



## **Closing Comments**

The project provides one model for conjunctive surface water and ground water use, but certainly not the only model. Micron is treating the recharge water to meet specific Company goals and requirements related to water quality. Treatment may or may not be applicable for other projects, depending on the situation.

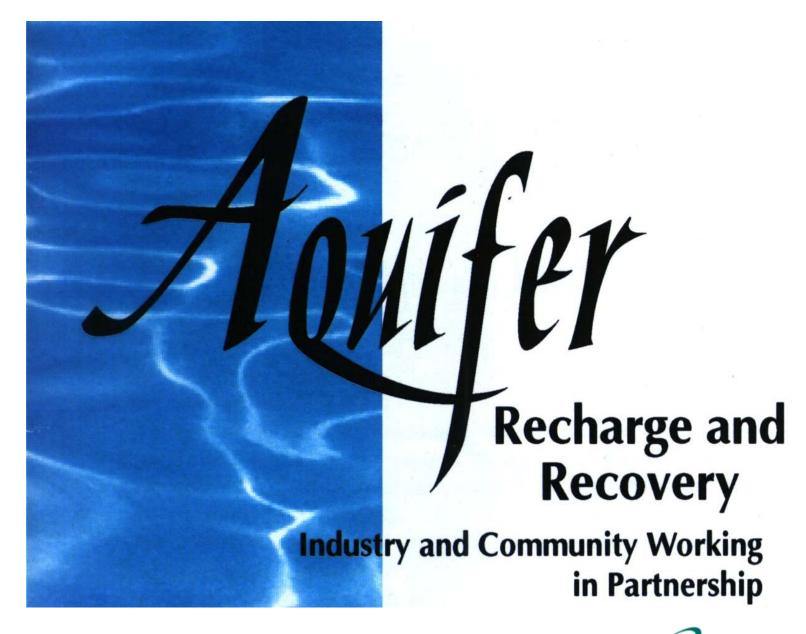


## **Closing Comments**

The water right mechanism for recovering recharged groundwater (i.e., new water right permit with mitigation plan) is flexible enough to accommodate a variety of recharge, storage, and recovery situations.

Future projects of this nature will require the cooperation of other water users, and local, State, and Federal entities.





13

© 2004 Micron Technology, Inc. All Rights Reserved.

